Patent Claims

A method for transforming a picture area, in which, depending on a decision unit, firstly a vertical transformation of the picture area and 5 then\a horizontal transformation of the picture firstly conversely, the horizontal or, transformation and then the vertical transformation are carried out.

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- 2. The method as claimed in claim 1, in which the picture area has an irregular structure.
- 15 3. The method as claimed in claim 1 or 2,
 - a) in which, before or after the vertical transformation, the picture area is oriented along a horizontal line;
- b) in which, before or after the horizontal transformation, the picture area is oriented along a vertical line.
 - 4. The method as claimed in one of claims 1 to 3, in which at least one of the following mechanisms is carried out by the decision unit:
 - a) if the picture area is present in the line interlacing method, firstly the horizontal and then the vertical transformation is carried out;
- 30 b) that (horizontal or vertical) transformation is carried out first along which a correlation of pixels of the picture area is stronger.
- 35 5. The method as claimed in one of the preceding claims, in which an additional dimension is taken into account in the transformation.

- 6. The method as claimed in claim 5, in which the additional transformation is carried out along a time dimension.
- The method as claimed in one of the preceding claims, in which a side information item containing the order of the transformations is generated by the decision unit.
- 8. The method as claimed in one of the preceding claims,
 in which the horizontal transformation follows from the vertical transformation in that mirroring on a 45-degree axis is carried out before the transformation.
- 9. The method as claimed in one of the preceding claims,
 20 in which the vertical transformation follows from the horizontal transformation in that mirroring on a 45-degree axis is carried out before the transformation.
- 25 10. The method as claimed in one of the preceding claims,
 for use in a coder for compression of picture data.
- 30 11. The method as claimed in one of claims 7 to 10, in which the side information item is used in a decoder for decompression of the picture area.
- 12. The method as claimed in claim 10 or 11, in which modes of operation of the coder and/or of the decoder are determined according to an MPEG standard or according to an H.26x standard.

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13. The method as claimed in one of the preceding claims,

in which the transformation is a DCT transformation or an IDCT transformation which is the inverse thereof.

14. An arrangement for transforming a picture area,

having a decision unit which is set up in such a way that, depending on a value determined by the decision unit, firstly a vertical transformation of the picture area and then a horizontal transformation of the picture area or, conversely, firstly the horizontal transformation and then the vertical transformation can be carried out.

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